

### **Introduction**

Claims 1-13 and 18-28 are pending in the instant application.

Claims 1-3 and 18-28 stand rejected under 35 U.S.C. §103 over U.S. Patent No. 6,133,288 (Grese I); 6,004,971 (Grese II); and 5,726,186 (Grese III).

Claims 1-11, 13, 18-26 and 28 stand rejected under the judicially created doctrine of obviousness type double patenting over claims 1-3 of Grese III.

Claim 1-5 and 18-20 stand rejected under the judicially created doctrine of obviousness type double patenting over claims 1-3 of Grese II.

### **Obviousness**

Claims 1-3 and 18-28 stand rejected under 35 U.S.C. §103 over U.S. Patent No. 6,133,288 (Grese I); 6,004,971 (Grese II); and 5,726,186 (Grese III). Applicants traverse this rejection and request withdrawal of same.

According to the Examiner, "The generic structure of Grese encompasses the instantly claimed compounds ...." It would appear that this overlap in claim scope forms the foundation for this obviousness rejection.

The compounds of the present invention as presently (and originally) claimed are directed to fluoro-substituted compounds useful as estrogen receptor modulators. Grese discloses a genus of compounds which includes fluoro as a potential substituent. However, when one reads beyond the broadest disclosure, Grese teaches a preference for hydroxy or derivatized hydroxy substituted compounds.

"Preferably, R<sup>1a</sup> and R<sup>2a</sup> are methoxy or a suitably protected hydroxyl, R<sup>3a</sup> is -H, and X' is -O-." Column 9, lines 17-19.

"Preferably R<sup>1a</sup> is -OH, R<sup>3a</sup> is -H, X<sup>d</sup> is OH, Y<sup>d</sup> is CH<sub>2</sub>CH<sub>2</sub>, and R<sup>2a</sup> is methoxy." Column 10, lines 57-58.

"Preferably, R<sup>1a</sup> and R<sup>2a</sup> are suitably protected hydroxyls, R<sup>3a</sup> is H, X is -O-, Y is -O- or -S-, and R<sup>6</sup> is -C<sub>6</sub>H<sub>5</sub>." Column 12, lines 31-33.

"In this embodiment of IIIc it is preferable that R<sup>1a</sup> and R<sup>2a</sup> are methoxy, R<sup>3a</sup> is H, X is -N(COC(CH<sub>3</sub>)<sub>4</sub>)- or -N(COC(CH<sub>3</sub>)<sub>4</sub>)-, Y is -O-, and R<sup>6</sup> is preferably -C<sub>2</sub>H<sub>5</sub>." Column 12, lines 40-44.

"In a preferred embodiment, in which R<sup>1a</sup> and R<sup>2a</sup> are t-butyl dimethylsilyloxy or methoxy, R<sup>3a</sup> is H, and G<sup>a</sup> is -OSi(CH<sub>3</sub>)<sub>4</sub> ...." Column 14, lines 22-25.

"A preferred method for the deprotection of t-butyldimethylsilylethers, a preferred embodiment of R<sup>1a</sup> and R<sup>2a</sup> ...." Column 16, lines 18-20.

"Preferred formula Ia compounds are those in which R<sup>1</sup> and R<sup>2</sup> each are methoxy, or R<sup>1</sup> and R<sup>2</sup> each are hydroxy, R<sup>3</sup> is H, R<sup>4</sup> is piperidinyl or pyrrolidinyl, X is -O-, Y is -S-, W is -CH<sub>2</sub>-, and n is 1." Column 16, lines 26-29.

"Preferred formula I compounds from this reaction are the same as those preferred formula I compounds described above ...." Column 16, lines 61-63.

"Preferred formula VI compounds are those in which R<sup>1a</sup> and R<sup>2a</sup> are each individually -H or methoxy, and R<sup>3a</sup> is -H. Most preferred is the compound in which both R<sup>1a</sup> and R<sup>2a</sup> are methoxy." Column 19, lines 36-40.

"For example, when R<sup>1a</sup>, R<sup>2a</sup>, and/or R<sup>3a</sup> of a formula IIc compound are C<sub>1</sub>-C<sub>4</sub> alkyl hydroxy protecting groups, such groups can be removed via standard dealkylation techniques to prepare an especially preferred compound of formula IIc. In the most preferred examples of formula II compounds R<sup>1</sup> and R<sup>2</sup> are each individually -H, -OH, or methoxy, Y is -CH=CH-, B is -CH<sub>2</sub>-, n is 1, W is -CH<sub>2</sub>-, and R<sup>4</sup> is 1-piperidinyl or 1-pyrrolidinyl.

An alternative method involves the formation of preferred compounds of formula I or II by replacing the R<sup>1</sup>, R<sup>2</sup>, and/or R<sup>3</sup> hydroxy groups of a formula I or formula II compound with methoxy." Column 21, lines 47-58.

"Other preferred compounds of formula I or II are prepared by replacing the newly formed R<sup>1</sup>, R<sup>2</sup> and/or R<sup>3</sup> hydroxy groups of a formula I or formula II compound with a moiety of the formula -O-CO-(C<sub>1</sub>-C<sub>6</sub> alkyl), or -O-SO<sub>2</sub>(C<sub>4</sub>-C<sub>6</sub> alkyl) ...." Column 21, lines 62-66.

Moreover, it should be noted that there nearly all of the exemplified compounds within Grese contain hydroxy or derivatized hydroxyl groups while none are halo substituted. Applicants respectfully assert that in view of Grese's teachings as a whole, motivation to select fluoro substituted compounds is absent. As such, Applicants respectfully assert that the Examiner has not made out a prima facie obviousness in view of Grese I, II or III. Reconsideration is respectfully requested.

**Obviousness Type Double Patenting**

Claims 1-11, 13, 18-26 and 28 stand rejected under the judicially created doctrine of obviousness type double patenting over claims 1-3 of Grese III and Claim 1-5 and 18-20 stand rejected under the judicially created doctrine of obviousness type double patenting over claims 1-3 of Grese II.

Applicants respectfully traverse these rejections and request withdrawal of same. According to the Examiner, "Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of formula I and II where R<sup>1</sup> is F." It appears the examiner has taken the position that IF one selects F from the definition of R<sup>1</sup> as defined in Claims 1-3 in Grese II and III, then overlap in claim scope is found and therefore there is a lack of patentable distinctness between Applicant's claims and those of Grese II and III. Applicants comments above with respect to obviousness under §103 are pertinent to this discussion of double patenting.

Claims 1-3 in Grese II and III contain a list of possible substituents wherein one potential selection is fluoro. Claim 1 in both Grese II and III define R<sup>1</sup> as follows:

"R<sup>1</sup>, R2 and R3 are each independently -H, -OH, -O(C1-C4 alkyl), -OCOC6H5, OCO(C1-C6 alkyl), OSO<sub>2</sub>(C<sub>4</sub>-C<sub>6</sub> alkyl), OSO<sub>2</sub>CF<sub>3</sub>, Cl or F"

However, when a selection from this list is actually claimed, i.e., Claim 4 in Grese II and III, only hydroxyl, derivatized hydroxy or unsubstituted compounds are claimed. Applicants respectfully assert that in view of Grese's claims as a whole, motivation to select fluoro substituted compounds is absent. As such, Applicants respectfully assert that the Examiner has not made out a prima facie obviousness patentable non-distinctness in view of the claims in Grese II or III. Reconsideration is respectfully requested.

Respectfully submitted,

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